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Z*NET: ATARI ONLINE MAGAZINE â ,â   Copyright (c)1993, Syndicate Publishing
   Volume 8, Number 1   Issue #485   January 2, 1993   File:93-01

â ,â   Publisher/Editor.....................................Ron Kovacs
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â ,â   Z*Net News International Gateway......................Jon Clarke
â ,â   Z*Net News Service....................................John Nagy
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GEnie.............Z-NET   CompuServe....75300,1642   Delphi.........ZNET
Internet...status.gen.nz   America Online..ZNET1991   AtariNet..51:1/13.0

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        # CompuServe Expands To Hong Kong.......................
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        # Reader Commentary......................Richard Sitbon
        # CMC Expands...........................Press Release
        # Z*Net Calender..
        # AtariUser Reviews.....................................

THE EDITORS DESK
By Ron Kovacs
--

Happy New Year! Before we get into this special vacation edition of
Z*Net, here is Jon Clarke's Xmas/New Year Greeting.

                Seasons Greetings from the Gateway
                                                 .-~~~-,
                Ron (The Boss) Kovacs   (   )
                 Z*NET International   (   )
                      -^x^-   (   )
                    /~   ~\   (   ) John Nagy
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         From the | | (   )   BOSS
  Z*NET INTERNATIONAL CREW | __ _,   (~~~~-(   )
      HAPPY 1993   /\/\ (.).)   `_'_', (   )
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                The Editor   Z*NET PACIFIC   Z*NET South
                Ed Krimen   Jon Clarke   Chris Thorpe

Thanks Jon!

This is our first edition of the new year and we start it off by having
the ENTIRE staff on vacation. It turns out that I am the ONLY person
working during this holiday. :-)

Missing from this issue are: The Z*Net Newswire, The Unabashed
Atariophile and the Perusing GEnie column. They will be back next week.

OTHER NEWS

If you are up to date on community news, you should know by now that
there are a number of comments and allocations being made against the
mail order company, ABCO. This is the same company that advertises in
ST Report Online Magazine each week.

In our last few editions of the 1992, we told you about some of the
things taking place and also published an article written by one of
their unhappy customers. In the last three weeks, more people are
surfacing with problems, specific to ABCO Computer.

In our own investigation, if you want to call it that, we have validated
the Better Business Bureau's label of unsatisfied rating, and spoke
breifly with Ralph Mariano, the owner. He commented, "ABCO will satisfy
all of it's customers.", Mariano went on to state that he had over 2800
customers. Mariano has not commented publically about the situation nor
of the lawsuit filed by one of his unhappy customers.

For futher information about ABCO, read the next edition of Atari
Explorer Online magazine, due January 2, 1993.

TOP 100 DOWNLOADED FILES OF 1992 ON GENIE (ST RT)
Compiled by Ron Kovacs
--

F No. Filename   Rank   Uploader   Date   Bytes   Acc Lib
----- -------------   ----   ----------- -------- ------- ---- ---
22445 PINHED21.ARC   1   C.F.JOHNSON 920126   12544   1090   2
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25383  DUSNEWS1.ASC        2      Z-NET         920821    5248    1022  25
24702  LZH201L.LZH         3      ST.REPORT     920701   71296     976  40
24304  AEO_9203.LZH        4      Z-NET         920530  189696     869  38
25262  FALCONCO.LZH        5      JEFF.W        920813   11136     840  13
25522  STZIP200.LZH        6      M.FARMER2     920831  148992     834  40
24310  FONTGDOS.LZH        7      BOB-BRODIE    920531  462848     816  20
22547  ATARIHD5.LZH        8      B.REHBOCK     920201   78720     781   2
22969  LZH201J.LZH (LH5)   9      D.HELMS       920301   67328     769   2
23823  LZH201K.LZH        10      JEFF.W        920422   29696     754  40
26740  OXYDCOLR.LZH       11      DARLAH        921129  652160     728   8
24488  RATES.NEW          12      DARLAH        920612    7552     681  14
26515  VIEW132D.LZH       13      C.HERBORTH    921113   22272     656  28
24697  FALPRVEW.TXT       14      AD-VANTAGE    920630    6144     656  14
26549  MIDIBATL.LZH       15      ATARI-OZ      921116  488704     655   8
25535  POWERDOS.TXT       16      DRAGONWARE    920901    6656     643  22
25538  POWERDOS.LZH       17      DRAGONWARE    920901   27520     611  22
22253  ZNET9202.ARC       18      Z-NET         920111   32640     608  25
24276  W9UPGRAD.LZH       19      CODEHEAD      920529   81280     602   2
22135  ZNET9201.ARC       20      Z-NET         920103   32896     587  25
23758  ZNET9216.LZH       21      Z-NET         920417   46848     585  25
22719  ZNET9207.ARC       22      Z-NET         920215   54912     582  25
22417  ZNET9204.ARC       23      Z-NET         920125   44928     581  25
26877  PHNXDEMO.LZH       24      LEXICOR2      921211  211072     578  39
24521  AEO_9204.LZH       25      Z-NET         920614   48256     575  38
22335  ZNET9203.ARC       26      Z-NET         920118   35072     570  25
26558  TRAMIEL.LZH        27      ST.LOU        921117    8576     560  13
22545  ZNET9205.ARC       28      Z-NET         920201   40320     558  25
23342  TOOL19.LZH         29      D.FARRINGTO1  920321   97536     549   2
25030  AEO_9209.LZH       30      Z-NET         920725   43008     545  38
23212  ZNET9211.LZH       31      Z-NET         920314   38784     543  25
24383  FONTGDOS.TXT       32      R.WILSON36    920605    8192     531  20
22635  ZNET9206.ARC       33      Z-NET         920208   39936     530  25
22965  ZNET9209.ARC       34      Z-NET         920229   42368     524  25
25619  AEO_9213.LZH       35      Z-NET         920906   52224     523  38
25487  AEO_9212.LZH       36      Z-NET         920830   50176     519  25
23127  GOGODNCR.LZH       37      T.MAYFIELD1   920310   46336     512  12
23441  ZNET9213.LZH       38      Z-NET         920327   21632     511  25
23666  ZNET9215.LZH       39      Z-NET         920411   42368     509  25
26831  PCHROME3.LZH       40      D.HELMS       921206   44800     509  28
23554  ZNET9214.LZH       41      Z-NET         920403   28544     507  25
26621  ZNET9219.LZH       42      Z-NET         921122   48000     507  25
22837  ZNET9208.ARC       43      Z-NET         920223   56704     507  25
25224  AEO_9211.LZH       44      Z-NET         920808   43264     503  38
23128  HOTTOUCH.LZH       45      T.MAYFIELD1   920310   22656     503  12
25391  HLNUDE.LZH         46      J.SUPPLE      920822   28160     498  12
26598  STR846.LZH         47      ST.REPORT     921120   67584     496  19
23729  MANYGOGO.LZH       48      V.PATRICELL1  920415   43904     494  12
25113  AA_9207.TXT        49      AD-VANTAGE    920801    5248     493  14
26186  AEO_1617.LZH       50      Z-NET         921017   71680     492  38
25131  AEO_9210.LZH       51      Z-NET         920802   43520     490  38
25827  AEO_9214.LZH       52      Z-NET         920920   54016     488  38
26712  ZNET9220.LZH       53      Z-NET         921128   43776     487  25
23066  ZNET9210.ARC       54      Z-NET         920307   42112     485  25
25855  BCS_RTC.ARC        55      DARLAH        920924    6528     481  13
25890  AEO_9215.LZH       56      Z-NET         920926   37888     480  38
23345  ZNET9212.LZH       57      Z-NET         920321   31488     479  25
25609  TROI.ARC           58      KEBAUM        920905   31744     479  12
24750  SPX18.LZH          59      GRMEYER       920704    7040     476  28
22713  STR807.LZH         60      ST.REPORT     920214   60800     476  19
24382  STR823.LZH         61      ST.REPORT     920605   49792     474  19
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24848 AEO_9207.LZH        62    Z-NET         920711    33920    472  38
26161 STR841.LZH          63    ST.REPORT     921016    49664    471  19
22232 PRATT.ARC           64    JEFF.W        920109     4608    469  13
26247 STR842.LZH          65    ST.REPORT     921023    54144    469  19
22206 DISKDIAG.ARC        66    D.BECKEMEYER  920107    13440    468   2
26455 ZNET9217.LZH        67    Z-NET         921107    73856    467  25
22585 FAZE.LZH (LH5)      68    R.GLOVER3     920204     8192    465   2
24292 POOLFX92.LZH        69    V.PATRICELL1  920530    16128    463   2
24947 AEO_9208.LZH        70    Z-NET         920718    49280    461  38
25472 STR835.LZH          71    ST.REPORT     920828    49280    461  19
23331 STR812.LZH          72    ST.REPORT     920320    61696    457  19
24017 STR819.LZH          73    ST.REPORT     920508    49664    456  19
26743 OXYDMONO.LZH        74    DARLAH        921129   652800    455   8
25381 STR834.LZH          75    ST.REPORT     920821    76928    455  19
26556 GVIEW201.LZH        76    B.SCHULZE1    921117   378368    454  28
26830 AEO_SE1.LZH         77    AEO.MAG       921206    31104    454  38
22326 STR803.LZH          78    ST.REPORT     920117    61056    454  19
26345 STR843.LZH          79    ST.REPORT     921030    60288    453  19
27001 ZNET9223.LZH        80    Z-NET         921219    58624    451  25
25541 PMONITOR.LZH        81    DRAGONWARE    920901     3840    451  22
22480 DS_F_015.LZH        82    T.HARTWICK    920128    20352    450  12
23435 WARP_9.TXT          83    J.EIDSVOOG1   920327     5632    450  14
22328 FUJIMAUS.LZH        84    C.WALTERS1    920117    15872    450   2
24594 MACREAD.ARC         85    T.KROFTA      920623    19840    449   2
23842 STR817.LZH          86    ST.REPORT     920424    52608    448  19
22782 STR808.LZH          87    ST.REPORT     920221    51712    448  19
26514 STR845.LZH          88    ST.REPORT     921113    56960    446  19
23049 STR810.LZH          89    ST.REPORT     920306    66816    440  19
26523 ZNET9218.LZH        90    Z-NET         921114    45696    439  25
23194 STR811.LZH          91    ST.REPORT     920313    57728    439  19
25966 STR840.LZH          92    ST.REPORT     921002    65408    437  19
25048 TOADNEWS.LZH        93    TOAD-SERV.    920726     7424    435  14
26809 BRODIE3.ARC         94    ST.LOU        921205    12672    435  13
24088 STR820.LZH          95    ST.REPORT     920515    67712    435  19
24827 STR828.LZH          96    ST-REPORT     920710    82944    434  19
23034 KITTY2.LZH          97    T.HARTWICK    920305    36224    433  12
25664 FALC_PT2.ARC        98    JEFF.W        920910    16128    433  13
22242 STR802.LZH          99    ST.REPORT     920110    41344    433  19
22725 BOINKSAV.LZH       100    R.GLOVER3     920215    25344    432   2
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######  BLACKMAIL FOR FALCON
######  New Product Coming Soon
######  -------------------------------------------------------------
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Note: I obtained the following information from Digital-Optical-Analog,
Inc regarding BlackMail for the Atari Falcon030. I have obtained
permission to repost this information on GEnie, but PLEASE note the
following...

* This is not a product announcement. BlackMail hardware, software, and
FCC approval are expected to be completed in the first quarter of 1993.

* For futher information contact: info@doa.com

Please do not remove this notice from the text.
Gordon R. Meyer (GRMEYER)
ST RT Librarian

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BlackMail

BlackMail allows the design of an automated single or multi-user voice
mail system which can disperse prerecorded information to a caller,
store the caller's message, and forward it upon request.  Callers access
BlackMail using their touch tone telephone to navigate the system's
hierarchical voice mail menus, leaving or retrieving messages as
determined by the user.

BlackMail provides a powerful caller-specific telephone answering system
capable of selectively forwarding audio messages to another phone,
recording them for later retrieval, or archiving messages for future
reference.

BlackMail can also function as an information clearinghouse able to
deliver specific product or other information to customers twenty-four
hours a day.  BlackMail may be operated as a stand-alone application or
as a background task in conjunction with multitasking operating systems.

The system features flexibility...

- major functions are user configurable
- user may update many functions remotely
- full archiving of messages
- selective message forwarding
- automatic paging
- time stamping of messages
- adjustble message compression (1.5:1 - 6:1)
- hardware module can be utilized as a generic telephone interface for
  software and hardware developers

Theory of Operation

The BlackMail hardware module provides a software-controllable
connection to the user's telephone network.  The module is designed to
detect the presence of an incoming call, notify the BlackMail software
core, and then take the telephone line off-hook.  Once off-hook, the
BlackMail hardware translates incoming touch tones (DTMF) and transmits
their equivalents through the module's serial port to the BlackMail
software.  Using touch tones, callers may request specific information
previously uploaded by the system user, leave audio messages for
specific users, as applicable, and retrieve messages which have been
left for them.  All of these functions are controlled by the caller
using the appropriate numbers on their touch tone keypads.

Audio information is transferred between the telephone line and the host
computer via connections in BlackMail's hardware module.  Full duplex
audio information is transferred between the BlackMail hardware and the
host system's audio input/output jacks via a simple cable.  The
BlackMail software handles automatic audio time stamping of incoming
messages, message forwarding, message archiving, automatic paging, and
provides an easy-to-use graphical interface for BlackMail system setup
and message recording.

BlackMail Technical Details

Audio sampling:                     8-bit mu-law quantization
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Audio sampling frequency:        8KHz
Maximum Compression Ratios:      6:1 (platform dependent)
Telephone Interface Bandpass:    320-3700 Hz
Audio Jacks on the Module:       Standard RCA Phono
Weight:                          300 grams (0.66 lb)
Dimensions
  Height:                        2.9 cm (1.125 in.)
  Width:                         7.0 cm (2.75 in.)
  Length:                        12.1 cm (4.75 in.)
Telephone Interface Bandpass:    320-3700 Hz
Telephone Interface Overvoltage Protection:  1500V
Power Supply
 U.S.:      External UL approved power supply, AC-DC converter
   Input:   120 V AC, 60Hz
   output:  9V DC, 1.5A
 Europe:    External VDE approved power supply, AC-DC converter
   Input:   230 AC, 50 Hz
   Output:  9V DC, 1.5A
Operating Environment:  0 to 40 degress C (32-105 degrees F)
Enclosure:   Plastic exterior with non-skid rubber feet
Warranty:    6 month limited warranty on parts and labor

Minimum Hardware Requirements:
 Atari Falcon030 with 30 MB HD
 NeXT workstation with 105 MB HD
 Apple Macintosh with 40 MB HD and integrated audio I/O
```

All product or brandnames are trademarks or registered trademarks of
their respective companies.

Digital-Optical-Analog, Inc. reserves the right to change its product
specifications without notice as we continue to make product
modifications and improvements. BlackMail is to be submitted for
requisite FCC approval before the end of 1992. Final FCC approval is
required before sale or distribution of this product.

```
######  COMPUSERVE EXPANDS NETWORK PRESENCE TO HONG KONG
######  Press Release
######  ----------------------------------------------------------------
```

COLUMBUS, Ohio, Dec. 21, 1992 -- CompuServe Incorporated has extended
high-quality network access to the Pacific Rim with the installation of
a local access point in Hong Kong.

The Hong Kong node will be utilized by corporate customers of
CompuServe's value-added network services and members of the company's
online information service.

The newly-installed point of presence, CompuServe's first in the Pacific
Rim, will support asynchronous dial access up to 9,600 bits per second,
and X.25 service for CompuServe network customers.

"Installation of the node in Hong Kong complements our goal of providing
easy, economical access for our customers from a variety of locations
worldwide," said Greg Moore, CompuServe director of network marketing.

CompuServe has installed local access points in 16 major cities in Europe, Asia and Canada. Overall, the CompuServe network is accessible from more than 90 countries via CompuServe-installed points-of-presence or gateway networks.

CompuServe Incorporated provides frame relay, wide and local area networking services, business information services and software to major corporations and government agencies worldwide.

CompuServe also provides databases and services to meet both business and personal interests to more than 1.1 million personal computer owners worldwide through the CompuServe Information Service. CompuServe is an H&R Block company.

OPTICAL PUBLISHING ASSOCIATION
Membership Application/Information
--

OPA: Linking markets and technology for a new era of publishing

Your new career in optical publishing

Whether you know it now or not, your involvement in CDROM - and its myriad implications - is changing your job description and your career path. The OPA will help provide the basic background you need to apply new media to your problem. From SGML to new distribution channels, from writing the business plan to data conversion, OPA gives you the data you need to be successful in your project and product development.

Can you keep up on your own?

The Optical Publishing Association is the only professional and trade association dedicated to keeping its members informed about all the factors that constitute the emerging optical and digital publishing industry.

CDROM and multimedia integrate elements of the three most influential businesses in the communication economy: publishing, computing and entertainment. OPA's primary goal is to provide a forum where these disparate interests come together to form the heart of a dynamic new industry.

With news and developments coming from many directions, it is exceedingly difficult for any individual to follow all the events that will impact the ultimate success of your business. OPA keeps tabs on the industry and maintains a number of programs to keep its membership informed and involved, and ready to meet the challenges of new media.

Publishing: communicating complex ideas at a distance

At its heart, the publishing enterprise is the business of recording ideas for access by many potential customers. Multimedia and database publishing on CDROM combines the power of computing with traditional publishing models and techniques from a variety of communications and entertainment activities to deliver a vast spectrum of information: from basic text to motion video to new categories that integrate data in

fascinating new ways.

Corporate publishers

OPA keeps you current on techniques and technology. If your job is
capturing and delivering corporate documents to employees, or technical
documentation to customers; or if your application for new media is
sales support, training, or other innovative uses, OPA can give you the
background to build cost-effective alternatives to your existing
programs, and can even show you how to make new revenues from your
information inventories.

Commercial publishers

OPA wants to help you create successful new products, for both existing
customers and new markets. Effective business planning, marketing,
team-building, the changing distribution landscape and other issues are
equally as important as the technology and new delivery platforms. OPA
programs are intended to help you evaluate new opportunities, and
provide solid background on the technical choices that can turn those
opportunities to profits.

Programs

- "Digital Publishing Business," the membership newsletter which
  presents new publishing technology in the context of successful
  business enterprise. "DPB" integrates the news of the many diverse
  players in an evolving enterprise. "Linking markets and technology in
  a new era of publishing."

- OPA publishes and re-sells publications relevant to the broad spectrum
  of digital production and marketing. Members receive some free, like
  the semi-annual industry Executive Summary Report, and discounts on
  others.

- OPA Executive Director Rich Bowers is a sysop on CompuServe's CDROM
  Forum, providing up-to-the-minute expert answers to both developer and
  consumer questions. A number of OPA lists and publications are also
  available for down-loading, some exclusively for OPA members.

- The Technical Forum is OPA's interface to the standards development
  process. OPA has been directly responsible for two standards that
  relate directly to CDROM production and interface design.

- OPA will produce a number of seminars during the year, with focuses on
  business issues, product design, and technical development. Members
  get discounts on attendance.

- Special interest groups will emerge from the interests of the
  membership, with focuses on both corporate and commercial publishing
  issues.

- OPA members will receive periodic special offers and discounts on
  relevant products and services.

Join OPA Today!

In a rapidly changing industry, you have to know not only the latest
news, but also how that news will impact your plans or current projects.
Join with professionals who share similar challenges, and support the

OPA in its efforts to provide the information you need! As an
individual or corporate sponsor, your dues return real value throughout
the year.

OPA member benefits

OPA promotes and encourages the development of optical publishing;
educates the public about the benefits and applications of optical
publishing technology; and serves as a conduit for the exchange of
information, opinions and analysis within the optical publishing
industry. To accomplish these goals, the OPA offers the following
services to its members:

Professional members

Professional membership is open to any individual with interests in
optical publishing technology, production and/or market development

- One year subscription to "Digital Publishing Business," the OPA's
  newsletter dedicated to the business of CDROM and new media publishing
- A membership package including:
- A Nautilus intro CDROM
- A starter kit for CompuServe (to access the CDROM Forum and other
  services)
- A $50 discount coupon for a disc from One-Off CD Shops Inc.
- Semi-annual "Executive Summary" of the commercial and corporate CDROM
  publishing enterprise
- Participation in OPA Special Interest Groups
- A membership certificate
- Discounts for OPA and other related publications
- Discounts for OPA business and product development seminars
- Discounted ads in the DPB "Classified Index"
- Other discounts and special offers for OPA members to be offered from
  time to time

Corporate Sponsors

Corporate sponsorship/membership is open to any organization actively
involved, or planning to be actively involved, in publishing using
optical media, distribution or sales, and/or hardware or software
technology development for CDROM/multimedia products.

- Call for benefits and opportunities

Planned OPA Programs

OPA plans to offer the following activities, based on interest and
volunteer participation.

- Seminar series
- Organization of local/regional chapters
- Market research programs for specific market segments and technologies
- Special newsletters for OPA SIGS

Save $40 Join OPA NOW and receive a free copy of:

The CDROM Publishing Enterprise
Executive Summary Report: 1992 Mid-Year

- What is the installed base of CDROM drives, and how fast are they

selling?
- What is the penetration of CDROM in corporate publishing?
- What are the CDROM platform alternatives and how do they impact the
  business?
- How can you project sales for 1993 and beyond?
- What products and issues impact your planning?
- How can you evaluate market studies and reports?
- What are the essential issues for publishers?
- How is the distribution landscape changing?

The answers to these questions and more appear in this first semi-annual
report compiled by the Optical Publishing Association. If your job and/
or your company or project depend on solid information about publishing
on new media, you need this report. This publication is priced at $40,
but you get it FREE with your membership in OPA.

Complete the application and return to OPA. Don't get caught short,
join OPA today!

Become a member of the OPA today!

Membership dues schedule (please check one)

  Professional $85 per year ($125 outside N. America)
  100+ employees $1000 per year
  Less than 100 emps $ 400 per year

  Check enclosed (US funds from US bank required)
  Charge to credit card

  Charge card used (circle one)
      American Express   Visa   MasterCard

Charge to Card #:   Exp. date:

Signature: Today's date:

Name: Phone: (   )

Title: Fax : (   )

Company:

Address:

City: St: Zip: Country:

Please note any special areas of interest in which you wish to
participate:

  Education   Corporate tech-doc
  Legal markets   Corporate training
  Medical markets   Corporate sales support
  Entertainment   Business markets
  Other

Your primary CDROM host is:

  Intel-based   Macintosh   UNIX   CD-I   Other

Return to:

OPA Membership
PO Box 21268
Columbus OH 43221 USA
or call 614/442-8805, 614/442-8815 (fax).

For more information, email your address to Rich Bowers, 71700,3404

READER COMMENTARY
By Richard Sitbon
--

I'm not a professional writer and I don't even write any "letters to the
editor." But I have been a devoted Atari ST fan since 1985 and would
like to see others find the value in the computers such as I have. It
is for that reason I've taken the time write about the new ATARI
INTERNATIONAL CATALOG (which is in book format) and share some of my
perceptions.

First let me introduce myself. I own a business consultation and
educational resource company here in Kenai Alaska. I am also a full-
time Correctional Officer at a State Prison. Both aspects of my working
life require that I use a computer on a daily basis. My computer of
choice has been the Mega STe and 1040STe because I can easily teach
others to do my work. :-)

In keeping up with the Atari computer market via BBSs and magazines I've
often heard how disappointed users have been with the marketing skills
of ATARI. My perception of Atari computers has been and will continue
to be that, the users like me and you, sell these computers. It's
obvious there are not enough dealers to make an impact needed to keep
this company alive - so it must be the songs of praise from end users
and user groups that get people to buy the computer. In most cases to
buy an Atari computer you have to know an Atari user to find a mail
order house or local store. What does that have to do with my review of
the Catalog? Since we don't have many dealers and since the end user is
the best salesperson for Atari I thought this Catalog would be a great
asset to use when we introduce our computers to potential customers.

This Catalog is packed with programs descriptions, prices, distributor
addresses and the configurations required for the programs. It does not
contain all the programs and most of them seem non-USA available.
Certainly useful to some degree but yet it lacks a sales punch that
Atari could use in any literature it produces. For example, the Catalog
has a block indicating that it is produced on an Atari TT030 and using
Atari programs/printer etc... a great promotional mark. But that's on
the back inside cover. Nowhere in the book could I find descriptions of
the Atari computers or TOS versions! No list of dealers, publications
or even a small note proclaiming the Catalog as proof Atari produces
fine useful computers with excellent programs. As soon as you open it
up you're looking at the first listings (complete with screen shots I
might add) but not even an introduction to the reader from Atari the
company. There are blank pages marked "NOTES" which I find a total
waste of potential advertising space.

If I worked for Atari I'd ask the boss why we put out a Catalog that
didn't take advantage of all the blank "NOTES" space to promote the
company that makes the computers that drive programs? Why not design
the Catalog with non-users in mind so that if one of our salespeople
(read: end user) wanted to pass it on to others they would know what the
computers look like, act like and where they could find authorized
dealers.

I suppose he would say "Hey, this is an international Catalog we can't
go listing every dealer in the world!" Then I'd say "Hey boss. We
don't have that many dealers and that's the problem. We can and should
fit all the dealers in the book complete with pictures of our computers.
If we can grow by using these methods maybe next year we'll need
Catalogs for various continents. As it is now we can and should help
every reader of this Catalog find, buy and use the Atari computer!" I'd
also suggest the "boss" write a brief introduction for the book to give
the readers an impression of our company as not too big to reach out and
share our great products. If the executives at Atari want that advice
I'm offering it free.

Another problem with the Catalog I have is the way Atari ships them out.
I got mine by mail and it was packed in styrofoam peanuts within a
larger cardboard box. If I owned Atari I'd want to know who's idea it
was to waste so much money? These Catalogs could have been shipped
cheaper and just as well in a blister pack envelope. I want Atari to
make profits!

Aside from being a limited reference for programs, I find this Catalog
an utter waste of a potentially good introduction to the non-Atari user.
As I've said before; end users are the Atari sales team that sell the
most computers for Atari. We need all the materials we can get our
hands on to make our job a little easier. The Catalog costs $12.00 plus
$5.00 for shipping. I don't mind paying the $17.00 to get this but I
was very disappointed that it's not the "sales tool" I hoped it would
be.

(c) Richard Sitbon, PDI Enterprises PO Box 677 Kenai Alaska 99611-0677

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and that the author be identified as such.

You can contact me on GEnie: R.SITBON

CMC EXPANDS
Press Release
--

January 1, 1993

CMC EXPANDS - OPENING ITS DOORS TO ALL INDEPENDENT MUSICIANS WORLD-WIDE

The Computer Musician Coalition (CMC), an international, artist-driven
collaboration, dedicated to the success of electronic musicians world-
wide, announces the formation of a new division, the Creative Musicians
Coalition (CMC), dedicated to the success of all independent musicians

including the non-electronic bread.

CMC's success in the electronic arena has proved that there is a
waiting, desiring, and enthusiastic audience for new music world-wide.
CMC, because of its successes, is now able and capable to expand its
offerings to include both electronic and non-electronic music.
Therefore, effective immediately, CMC will accept original music
submissions from all independent musicians including music solely
acoustic, solely electronic, electronic/acoustic mixes, vocals,
meditation, and the spoken word.

CMC's magazine AFTERTOUCH - New Music Discoveries, also originally
electronic music based, will broaden to include new music from
independent artists in both arenas. Additionally, all CMC memberships
including: Connoisseur, Artist, Dealer, Radio Station, and Vendor will
expand to accommodate both categories.

Ron Wallace, president of CMC, states, "I am amazed at the enormous
acceptance by the general public for new music. It has always been my
dream for the success of the independent musician, and I feel now the
window of opportunity is wide open. It's time for all independent
musicians to unite and get out of their basements for the world to
enjoy. I offer each of them a dream-come-true and encourage their
support in all CMC endeavors."

For more information about CMC memberships, music submission procedures,
and a free copy of AFTERTOUCH - New Music Discoveries write or call:

Ron Wallace
Creative Musicians Coalition
Computer Musician Coalition
1024 W. Willcox Ave.
Peoria, IL 61604
Phone: (309) 685-4843
FAX: (309) 685-4878
Or Email: S.GARRIGUS (On GEnie)

THE 1993 Z*NET COMPUTER CALENDAR
Schedule of Shows, Events and Online Conferences
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January 6-9, 1993
MacWorld Expo in San Fransisco California, Sponsored by MacWorld
Magazine. Titled San Fransisco '93 at the Moscone Center. Mitch Hall
Associates, PO Box 4010, Dedham MA 02026; (617)361-0817, (617)361-3389
(fax).

January 7-10, 1993
The Winter Consumer Electronics Show comes to Las Vegas, Nevada. CES is
an electronic playground, with everything in the way of high tech toys
for kids and adults. Game consoles and hand-held entertainment items
like the Atari Lynx are big here, and Atari will attend with a hotel
suite showroom. Contact Atari Corp for more information on seeing their
display at 408-745-2000.

January 8, 1993
Dateline Atari! with Bob Brodie. This is a monthly RT conference on
GEnie. CO begins promptly at 10pm eastern time. Type M475 2 at any
GEnie prompt.

January 12-14, 1993
Networld '93 in Boston, Massachusettes

January 13, 1993
The Atari ST RoundTable proudly presents The Independent Association of
Atari Developers (IAAD) RTC, Wednesday, January 13, 10pm EST. The IAAD
Board and many of its members will be on hand to share their experiences
in the marketplace. Find out about the trials, tribulations, and joys
of developing for your favorite computer! Ask about current and future
products! Meet the folks who bring your computer to life with software
and hardware enhancements! Attending for the IAAD: Dorothy Brumleve of
D.A. Brumleve, President of the IAAD, Nathan Potechin of DMC Publishing,
Chet Walters, WizWorks!, Jim Allen of FAST Technology, Nevin Shalit of
Step Ahead Software Inc., Doug Wheeler of ICD Inc., John Eidsvoog of
CodeHead Technologies, Chris Roberts of Dragonware, John Trautschold of
Missionware, David Fletcher of Ditek, Craig Harvey of Clear Thinking,
Bob Luneski of Oregon Research Associates, John Cole and Lee Seiler of
Lexicor, David Beckemeyer of Beckemeyer Development Tools, Mark O'Bryan
of Paradigm Software Products, John 'Hutch' Hutchinson of Fair Dinkum
Technologies, Greg Kopchak of It's All Relative and more.

January 15-18, 1993
NAMM is the largest conclave of musicians each year. Held in Los
Angeles at the Anaheim Convention Center, the variety of sights at the
National Association of Music Merchandisers is wilder than at
Disneyland, just next door. Atari was the first computer manufacturer
to ever display at NAMM in 1987, and has become a standard at the shows.
A trade show for music stores, distributors, and professionals of every
strata, entertainers are seen everywhere at NAMM. Contact James Grunke
at Atari Corp for more information at 408-745-2000.

January 19-22, 1993
CD-ROM Development Workshop from Multimedia Publishing to Data Archival.
UCLA Extension Bldg, Los Angeles CA. (310)825-3344, (310)206-2815 (fax)

February 2-4, 1993
ComNet '93 in Washington, DC.

March 1993
CeBIT, the world's largest computer show with 5,000 exhibitors in 20
halls, is held annually in Hannover, Germany. Atari traditionally
struts its newest wares there, usually before it's seen in the USA or
anywhere else. In '93, the Atari 040 machines should be premiering, and
this is the likely venue. Third party developers also use this show to
introduce new hardware and software, so expect a wave of news from CeBIT
every year. Atari Corp and the IAAD coordinate cross-oceanic contacts
to promote worldwide marketing of Atari products, and this show is an
annual touchstone of that effort. Contact Bill Rehbock at Atari Corp

for information at 408-745-2000.

March 13-14, 1993
The Sacramento Atari Computer Exposition is to be sponsored by the
Sacramento Atari ST Users Group (SST) at the Towe Ford Museum in
Sacramento, California. This show replaces the earlier scheduled, then
cancelled Northern California Atari Fest for the Bay Area, to have been
held in December 1992. A major two day effort, the SAC show is being
held in the special events area of the Towe Ford Museum, home of the
worlds most complete antique Ford automobile collection. As an added
bonus, admission to the museum is free when you attend the Expo. The
museum is located at the intersection of Interstates 5 and 80, just 15
minutes from the Sacramento Metropolitan Airport. Contact Nick Langdon
(Vendor Coordinator) C/O SST, P.O. Box 214892, Sacramento, CA 95821-
0892, phone 916-723-6425, GEnie: M.WARNER8, ST-Keep BBS (SST) 916-729-
2968.

March 16-19, 1993
Image World - Washington DC at the Sheraton Washington.

March 20, 1993
Philadelphia, PA area group PACS is holding their 16th annual Computer
Festival from 9 AM til 4 PM. It will be a multi-computer show with
Atari showings by the PACS Atari SIG's, NEAT, CDACC, and JACS clubs.
The Fest is to be at the Drexel University Main Building, 32nd and
Chestnut Streets in Pennsylvania. Contact for Atari display: Alice P.
Christie, 207 Pontiac Street, Lester, PA 19029, 215-521-2569, or 215-
951-1255 for general info.

March 21-24, 1993
Interop Spring '93 in Washington DC.

March 30 - April 1, 1993
Intermedia 93 at the San Jose Convention Center, San Jose CA.

May 3-5, 1993
Digital Video New York/MultiMedia Exposition at the New York Sheraton
in New York City.

August 3-6, 1993
MacWorld Expo at the Boston World Trade Center, Bayside Exposition
Center and sponsored by MacWorld Magazine. This event is titled Boston
'93.

September 18-19, 1993
The Glendale Show returns with the Southern California Atari Computer
Faire, V.7.0, in suburban Los Angeles, California. This has been the
year's largest domestic Atari event, year after year. Contact John King
Tarpinian at the user group HACKS at 818-246-7286 for information.

September 20-22, 1993

The third MacWorld Expo, titled Canada '93 at the Metro Toronto
Convention Centre, sponsored by MacWorld Magazine.

September 21-23, 1993
Unix Expo '93 in New York City, New York.

October 27-29, 1993
CDROM Exposition at the World Trade Center, Boston MA.

November 15-19, 1993
COMDEX Fall '93. Las Vegas Nevada.

If you have an event you would like to include on the Z*Net Calender,
please send email via GEnie to Z-NET, CompuServe 75300,1642, or via
FNET to node 593 or AtariNet node 51:1/13.0

ATARIUSER REVIEWS
Reprinted from the November Edition

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The new hardware and software for Atari products continues unabated by
adverse economy or market conditions. So much has come out in the last
months that we've accumulated a backlog of reviews--there's been too
much to say and not enough room to say it. So this month, AtariUser is
catching up, presenting reviews of more than 20 new products including
hardware, software, games, applications, even books. Don't look back,
because here comes the AtariUser Holiday Atari Feast of Products!

Gemulater ST on a PC
Emulation Hardware/Software; PC

Calamus on an IBM? Yes. One of the most interesting new developments
for the Atari user is Gemulater, introduced at the recent Southern
California Atari Faire by its inventor, Darek Mihocka. This system, a
combination of software and hardware, allows you to run your Atari
programs on IBM PC's and clones!

Darek is well known for developing software in 1987 that let an ST
emulate an 8-bit Atari computer. Since then, he's been talking about
doing an ST emulation on a PC, and now he's made good on his boast.
This thing actually works, although with some limitations and some
substantial machine requirements.

Some people ask why you would want to do this, run Atari software on a
PC. The most common buyers (other than the super-user who is really a
hardware collector) are going to be Atari fans who are stuck using a PC
at work, and who want to use some of their familiar programs at the
office. For those who have both types of machine at home, they can now
have a backup ST for emergencies. And those loyal Atari fans who have

been bragging about the programs we can use, can now talk their PC using friends into enjoying our luck. Yes, Gemulater might actually increase the number of people buying Atari software, as well as extending the Atari life of users who have switched computers for whatever their reason.

The requirements to use this system are severe. A minimum of a '386 PC with at least six megabytes of RAM are needed to run the Atari emulation. In fact, anything less than a '486 system running at 33 MHz will give results too slow to be satisfying. However, such systems are becoming common, especially in office and business situations.

This conversion is accomplished by a combination of software and hardware. The software does a full emulation of the 68000 instruction set, rather than trying to insert a Motorola microprocessor into the PC. The hardware is an accessory board which is placed in an empty slot on the PC motherboard and contains one or more sets of Atari TOS ROMs.

Although it sounds a little unusual, the two pieces are sold separately, by two different companies. The plug-in board is being sold, with a ROM set installed, by Purple Mountain Computers. The software is provided as shareware, by the author's company, Branch Always Software. Version 1.00 is being distributed by all the usual means for public domain programs, and the author requests that the user pay a $59.95 shareware fee. Registered users will receive printed documentation, a newsletter and an upgraded version (presently version 2.0) that's up to 30% faster, uses less memory, and has more features.

In operation, the ST software is loaded into PC RAM, and is read by the Gemulater program. If the instruction to be executed is located in TOS, the ROM set is read from the card in the PC. In any case, the 68000 operation code is used to call an appropriate routine to emulate it in Intel (PC) code. Naturally, this takes a great deal of time, so the emulation will seem very slow except on the fastest of PC's.

The size of the program to do the emulation is about three and a half megabytes. This is because the 68000 instruction set can have some 50,000 possible instructions, counting all addressing modes. Each one of these has a corresponding routine in the emulator.

One of the failings of PC computers is segmented address space. This was a limitation of earlier Intel microprocessors and is the source of the often cursed "640K" limit that PC'ers are faced with. Newer Intel processors are not limited in this respect (our Motorola processors never were), but PC's are still configured in the old manner to permit using old software.

Because the Gemulater program is so large, and because Atari programs expect a linear address space, this system must be run on one of the newer machines, using an Intel 80386 or 80486. The computer should have at least five and a half megabytes of available RAM. That is three and a half for the program and two megabytes of memory for the Atari programs, emulating an ST with 2 meg of RAM.

If you don't have enough memory, the Gemulater can use virtual memory. That is, it will keep part of itself in a temporary file on your hard disk, and swap sections between RAM and hard disk as needed. Of course, this will slow operations even further, so it is best to run the emulator from RAM only.

The registered version of Gemulater (now at V.2.0), the one sent to
people who pay the shareware fee, permits using one to eight megabytes
of memory as Atari RAM, in one megabyte increments, and it has been made
a bit smaller, about three megabytes. Also the execution time has been
improved.

Pluses and Minuses

Gemulater has some flaws which may be overcome in time. It also has
some advantages. The first thing that should be mentioned is that there
is no emulation of the cartridge port, MIDI, sound, or of the Blitter
chip. This means it is not suitable for many Atari games. There will
also be problems running programs that use copy protection, particularly
those that use a hardware device for protection, mostly expensive music
programs. The shareware version does not support the serial (modem)
port, although printers plugged into the PC parallel port should work
normally.

Another major point is the use of hard disks. Atari and the Dos world
used identical hard drive formats--until they were faced with the need
to use partitions larger than 32 megabytes. There, they diverged, using
non-compatible designs. The result is that for partitions smaller than
32 megabytes, the Gemulater is happy. But it can and will write beyond
32 meg and damage the data there by using the wrong method of addressing
the drive.

In the first released version of the program, writing to the hard drive
is disabled. The registered version of the program allows writing to
the hard disk, but with strong warnings about using partitions larger
than 32 megabytes. The author of Gemulater plans to write a new hard
disk driver that will eliminate this difficulty.

Before you think everything is bad news, there are some things the
Gemulater can do that the ST does not do. One of these is the use of
1.44 Megabyte floppy disks. Most PC's these days use high density
floppy drives. The emulator board comes supplied with TOS V.2.06, so it
will read and write high density floppies. Floppy disk formatting is
not enabled, but you can easily format them under DOS.

It should be mentioned that the ROM reader board has sockets for eight
ROM chips. It comes with TOS in a two chip set, installed. The user
may insert other versions of TOS into the remaining six sockets; one 6
chip set, or up to three more 2 chip sets. When starting the emulation,
you select the TOS you want at the moment. All versions below 3.0 are
supported, although reports of some problems when using the briefly used
2.05 version, and with a two chip set (as opposed to the more common 6-
chip set) of TOS 1-point-anything, you'll have to add a simple pair of
jumper wires to an empty spot in the Gemulater board. Darek is updating
his docs to cover this.

Another feature which is available in the registered version is the
ability to use the PC's VGA screen to emulate the Atari TT's medium
resolution, 640 x 480 with 16 colors on screen. It looks like an
extended graphics card mode to any ST software. Calamus SL and other
applications can use this mode and operate in color! A simple AUTO
program called VGA.PRG enables it.

How To Use It

With the Gemulater board and software installed in the PC, the program

can be executed from the DOS prompt. In order to use the PC's memory in
a linearly addressed manner, it must be run in Intel's protected mode.
A utility that will reconfigure the PC is provided, and is run
automatically when Gemulater is invoked. The program takes some time to
load (it is very big!), and will then display a prompt for the user to
type in his commands, including choice of color or monochrome operation,
and choice of which PC floppy drives to use.

After you tell it to install your chosen TOS, the next thing you see is
the usual Atari startup display. In the case of TOS 2.06, you see the
Fuji logo. Even though you are expecting this, it will knock your socks
off, the first time you see it on a PC. If you have placed a floppy
disk in drive A, it will read your desktop information, AUTO folder
programs and accessories to be installed. You are, in fact, now
operating an ST.

This procedure can be done under Microsoft Windows. A batch program,
GEMULWIN.BAT, is provided to assist in this. From Windows, call the DOS
prompt, and then run the batch program. The procedure is then the same.
You can suspend the emulation, like any other PC program, and return to
Windows, run other programs and then return to the emulation. The
pictures shown with this article were made in exactly that way.

If you have enough memory, you can even install two copies of Gemulater,
in different windows, and be running two Atari applications
simultaneously. In other words, multitask!

In color operation, when the Emulator's window is made inactive, the
palette changes. This is a function of Windows, and cannot be adjusted.
However, the colors will be correct when the emulation is made active
again. Monochrome doesn't show any difference.

How Fast is Slow?

It's ironic that the most used measure of Atari computer speed, quick
Index, is another product of Darek Mihocka. Most measures of the speed
of Darek's Gemulater are done using Darek's own yardstick, and while
some users and developers have complained that Quick Index is to
simplistic, it remains popular. Tests on a '386 33MHz PC indicate the
reasons you need more: CPU Memory is only 53% of that of a stock ST,
even while shifts and divides are more than double that of an ST.
Screen output is almost normal for text, two-thirds normal dialog boxes,
and scrolling is less than half the speed of a "normal" ST, let alone an
STe.

Move up (waaaay up!) to a '486/DX/50 plus a fast video card, and things
improve a lot. Fully tweaked for performance (and using a software
screen speeder), CPU goes to 192%, bringing 16 MHz accelerated MegaSTe
performance to the PC. Disk operations go from half speed on the '386
to well over full speed. Text output hits nearly five times ST speed,
while scroll and dialogs are near 200% each.

In operation, even the fast PC's give the user a sense that things are
moving a bit behind time. The operations are mostly fast enough, but
they happen perceptibly after they are asked for. Mouse clicks are the
most obvious of these, as you double click, and as your brain decides it
must not have "taken", the function executes. It takes only a little
use to adjust, and in fact gives overall responsiveness nearly exactly
like that take as "normal" in Windows.

What Works

The system has been shown to work with many popular Atari programs.
These include the DTP programs Calamus SL, Pagestream and Publishing
Partner; word processors such as WordWriter and 1st Word Plus; painting
programs Prism Paint and Degas Elite; business programs LDW Power and
Pha$ar; and many others, like Hotwire, MultiDesk, MaxiFile and, very
importantly, the screen accelerator, Warp 9. Using Warp 9 will speed up
the screen redraws on the PC/ST just like on a real ST, and is really
needed to help the emulation.

Other applications and such that have been reported to work fine under
Gemulater include NeoDesk (all versions), Laser C, ARCSHELL, the Control
Panel, Universal Item Selector. Atari's MACCEL3 crashes, but SilkMouse
and the Warp 9 mouse accelerators work.

Conclusions and Speculation

Gemulater, like any new product, will be found to have some faults that
require correction, but it is clear that these can be overcome. The
important fact is that it works with a large number of programs and
proves that TOS can be run on a foreign system. It is slow, unless a
very powerful PC is used. However, PC speeds are increasing, and prices
are falling, so, it is possible to run at a usable rate now, and it
should be possible to improve this in future.

Sure, there are problems left. Communication to the storage media needs
more work, as discussed above. Realistically, the shareware version
without hard drive access will be more annoyance that it is worth, as
you can't so much as write a config file to your drive. There are some
minimal mouse problems--the image lags due to fewer redraws, causing the
user to overshoot. It will be a while before the serial port works. If
the Gemulater crashes, it takes a complete reboot of the PC to reclaim
the memory if running in Windows.

But it should be emphasized that the emulator is software.
Difficulties, as they are discovered, can be fixed without buying new
hardware. Aa an example, a last-minute fix to version 1 allows GFA
BASIC to operate properly. Some things, like sound control and MIDI
ports, would require additional hardware in the PC and software to
interface to it.

The author, Darek Mihocka, is a longtime Atari developer, who now works
for Microsoft Corp. He is in a unique position, being thoroughly
familiar with programming the ST and being in a position to understand
the internal operation of Microsoft Windows and other PC software. This
has allowed him to marry the two computers, and he has already shown his
intention and willingness to support this product, and continue
improving it.

Longer term, Darek has said that he'll be considering using the same ROM
board for other emulators he's planning for the PC, including the Atari
8-bit computer. This one should be easy now, as Darek showed a nearly
finished (and full speed) version of the PC-XFORMER over a year ago at
the Glendale show. And even MAC emulation on the PC is in Darek's plan,
with MAC ROMs used on the same board, while Darek's own future MAC
emulation software would reside in the PC.

Gemulater cannot replace the Atari computer. Falcon or TT 68030
emulation is at best a glimmer in Darek's eye today. Gemulater cannot

be made to work with all Atari software, especially those with hardware
copy protection devices. But it can make a very satisfactory second
machine, for most uses. And it might expand the market for ST software,
which will benefit everyone who uses Atari computers.

The Gemulater ROM Reader Board with TOS 2.06 sells for $299.95 from
Purple Mountain Computers, 15600 N.E. 8th Street Suite A3-412,
Bellevue, WA 98008. The Gemulater software, version 1.00 is in the
public domain. To register and get updated versions, send $59.95 US to
Branch Always Software, 14150 N.E. 20th Street Suite 302, Bellevue, WA
98007. -- Reviewed by Norm Weinress, who assisted Darek as a Beta
tester during development of the Gemulater.

Migraph Wand - Full Page Scanner
Hardware; ST, STe, TT, Falcon

Migraph brought the ST the first quality hand scanner some years back.
With the advent of their new and competent Optical Character Recognition
software as well as other company's FAX software, there's a need for
affordable full-page scanning. Migraph has answered with THE WAND.

A full 8.5" wide scanning area in what could be seen as a "two-hand-
scanner" can scan a page in seconds. With the optional sheet feeder, it
can do it better, faster, and far straighter than by hand. And the
sheet feeder will hold 10 sheets in que for scanning. The full unit
becomes a wringer-washer setup, with a tray above and behind to feed
sheets out the front.

The Wand (manufactured by OMRON) does resolutions up to 400 DPI in 10-
DPI increments via an electronic selector pad on the unit when using the
revised Touch-Up software (V.1.84), included. I found the setting
process to be annoying, as you must set the software resolution first,
then dismount the scanner from the sheet feeder, click it to the chosen
resolution, then hold the SCAN button and move the scanner to make the
setting "take", and finally return the Wand to the feeder, ready to
begin. I wish the software could program the scanner, like the units
that cost far more than the Migraph unit.

Anyway, once you have a resolution set, you can scan all day using the
software to start the scans. You might scan graphics, particularly
photographs, a number of times before you have exactly what you want, as
the contrast knob is quite touchy--a little adjustment goes a long way.
And unlike the "light/dark" adjustments on most (all?) other scanners,
the Wand's control actually changes the CONTRAST. Wow!

And how are the scans? The Wand makes flawless IMG and other monochrome
format images, with four adjustable dither patterns or line art
settings. The Wand has a higher actual resolution than the Migraph Hand
Scanner, upping the number of grayscale equivalents to 256 when saving
files in a TIFF format. Grayscale images have the advantage of being
able to be resized without degradation. Unfortunately, a mono
conversion to grey TIFF must use pixel area averaging, losing detail in
the final grayscale image. Photographs scanned on the Wand and saved as
grayscale TIFF files are, in my opinion, unacceptably "soft" for use in
publishing except at small sizes. Migraph is looking into ways to
sharpen them. Saved as dithered PCX or IMG mono files, the detail is
impeccable, but at the cost of non-scalability without unsightly
patterning in the image.

For creating page images for FAXes, the Wand is perfect. For OCR, doing
a full page at a time will cut your work in half or more over hand
scanning. Migraph has upgraded their OCR software to take advantage of
the Wand as well, although automated multi-page operation is still not
available (but coming, says Kevin Mitchell of Migraph). The new (and
otherwise fast and wonderful) Touch-Up is updated for full page scans,
but lacks a low-res prescan and area selection for re-scan, a feature of
most high-buck flatbed software. As it is, you need a lot of memory
available even if you want to save only part of a full page. You'll
have to have room for the full page at full resolution, then clip what
you want.

You won't find a better full-page scanner at the price of the Wand. If
you need more that the Wand can do, buckle down and save for a three-
pass color scanner--of course, there's no domestic color scanner
software for the Atari yet, either, so take your time. The Wand's
suggested dealer retail price is $899, and includes the $299 OCR and
$199 Touch-Up software. Owners of the Hand Scanner from Migraph can buy
the upgrade to the Wand (re-use your interface/power supply) for $349.
Either way, you'll probably want to add the sheet feeder (another $249).
Other combinations and configurations are available through Migraph
directly, 32799 Pacific Highway S., Federal Way, WA 98003, phone (206)
838-4677. -- John Nagy

The LINK Host-in-a-Dongle
Hardware; ST, STe, TT

You want to use industry standard SCSI devices on your Atari. Atari has
a DMA/ACSI output. What to do? LINK it.

ICD Inc. has offered a top notch line of host adapters for installing
in a hard drive case for some years now. More recently, they offered a
Micro host adapter that mounted right on a SCSI hard drive and was
barely bigger than the end of the cable. That technology has now
evolved into the Link, the newest product of ICD.

There's not too much to say; the Link is self contained and powered off
the system you are using. It has a large-standard SCSI socket on one
end and an Atari ACSI socket on the other. Attach it directly to a SCSI
external device (hard drive, CD-ROM, Floptical, even printer) and your
Atari ST series will talk Atari, the drive will talk SCSI, and
everyone's happy. Fortunately, it's nearly that simple. The only
glitches in this easy solution come from occasional unexpected
interactions between other ACSI and SCSI devices. Some configurations
of mixed equipment may balk with a Link in line, but it's generally
resolvable with a swap of positions in the data chain or with
termination changes.

The Link comes in a pegboard-baggie with a DMA cable and the latest
driver software from ICD. Shipped with the unit I received was V.6.0.2,
which supports removable media including CD ROMS (!) and Floptical
disks. The software will fine operate without the Link, but the
installation, advanced caching, and formatting features won't work until
it is returned to the chain.

No, you can't use a Link backwards to convert the Falcon or TT SCSI port
to DMA for use with older internal-host devices like the SLM804 laser
printer. That'll take another, currently missing Link.

If you need a Link, you need it. There's no other practical answer.
Thanks, ICD, for making it a good answer. The Link, $99.96, from ICD
Inc, 1220 Rock Street, Rockford, IL 61101, phone (815) 968-2228.
-- John Nagy

PMC Freedom Floptical Drive - Big Bytes at Fast-food Prices
Hardware; ST, STe, TT, Falcon

Purple Mountain Computers broke the $400 price barrier with their
introductory offering of the Freedom Floptical Disk Drive. This is an
unassuming looking external 3.5" floppy drive unit that can take single
sided, double sided, 1.44 meg, and 21 megabyte disks. It attaches at
the SCSI port of a TT or via an ICD Link (included at the price!) to the
ACSI/DMA port of an ST/STe/STacy/TT.

What's a Floptical disk? It looks like a standard 3.5" floppy until you
slide open the metal door. You can see through the disk itself, and in
the right light you can see the rainbow of CD tracks printed onto the
upper surface of the disk. An infrared beam tracks on these guides like
a CD player, allowing ultra precise head placement and very dense data
packing. Hence, 21 megabytes on a single disk.

Performance: A Floptical mechanism can read and write "normal" disks at
twice the rate your old drive "A" can. And the special 21 meg disks
read and write at 4 times the speed of a standard floppy, and about 1/4
the speed of a standard hard drive. That's not shabby, and near the
rate of the first Atari hard drives that were dazzling in their day.
Disks are presently about $25 each, but prices should drop steadily in
the coming year, to as low as $5 according to some industry officials.

These little marvels are the way of the future. Like all Flopticals,
PMC's drive uses the InSite drive mechanism, so PMC's unit will perform
exactly like any other Floptical. Buy on features, appearance, and
price. I found the Freedom to operate flawlessly with the highly
considered ICD software, included. However, you won't be able to fully
use the drive with older computers, as TOS 1 and 1.2 can't handle the
4-sector-per-cluster arrangement that the Floptical automatically uses.
With 1.4 and newer, you're golden.

Features: almost none are available, but one I'd like is a SCSI ID
reassignment switch available externally. PMC hasn't got one--you need
to open the unit and move jumpers on the drive itself to select a
compatible ID if you need it to be other than #2, as it arrives.
Appearance: the PMC Freedom is as plain as allowed by law. In a word,
beige. A ribbon cable exits the back of the unit, terminating in a
clamp-on SCSI connector. A pair of unlabeled (and disconnected inside)
connectors languish on the back panel, left over from some earlier
intention for this particular case. The metal rear plate of the case
gets quite (but not alarmingly) hot, as the power supply heat sink is
attached to it. I noted some minimal RF interference on my mono monitor
when accessing the PMC Floptical. Price: PMC has the best price yet, by
a considerable margin, at the $399 introductory level. Even when/if
PMC's price goes up, they'll be below the present competition.

I'm hooked. I have a SyQuest 44 meg removable drive, but the
versatility of the Floptical convinces me that it's the way to go today
except for high-speed applications like direct-to-disk audio. Access
speeds aren't critical if you have a hard drive already, and even if you
are using the Floptical instead of a hard drive, it's not going to keep

you waiting. In fact, I'd recommend new owners to consider a Floptical
even BEFORE a hard drive, to get the best of versatile storage and
portability up front.

Someday all computers will have a Floptical drive instead of the
suddenly meager 1.44 standard of today. Until then, do it yourself.
The econobox of drives, the PMC Freedom is today's best buy. The $399
introductory price is still in effect, and includes one 21 meg disk,
drive, case, power supply, ICD Link, DMA cable, and ICD driver software.
More disks are $19.95 each in 4-packs. Purple Mountain Computers Inc.,
15600 NE 8th Street Suite A3-412, Bellevue, WA 98008, phone (206) 747-
1519. -- John Nagy

Cyberdrome - Virtual Reality Simulator
Game; ST, STe, TT

This new game is a little strange. If you're looking for a quick 3-D
shootemup, Cyberdrome isn't it, despite having 3-D vector graphics and
shootemup elements. It's a little more on the cerebral and simulation
side, designed with multiple remote players in mind.

Cyberdrome's storyline is reminiscent of the movie Tron. A big nasty
program named CJER (cee-jer) has taken over part of a crystal mainframe
computer and wants to eventually rule the whole virtual-thing. CJER has
created an army of mutant combat programs to aid in its conquest.
That's where you come in. At the helm of your virtual-reality hoverjet
program, you must curb CJER's delusions of grandeur by deleting his
minions into data oblivion.

The game operates on a charge/attack cycle. In the charge cycle, you
look for a memory mine, which is an "underground" (sub-grid) maze of
tunnels containing many defense systems and the all-important
transmitter. Key-cubes must be collected to unlock security gates,
allowing you to reach the transmitter. Deleting it provides you with
the access code to the next memory mine, but also sets the current mine
to overload and self-deletion. You only have a few seconds to exit the
mine before it goes.

During the attack cycle, a Predator program (looking spider/mantis-like
in the virtual reality of the Cyberdrome) is released and heads for your
comm-port, your link into the computer. You can destroy the Predator
program (not easy) but another one will be launched in its place. This
will go on for the duration of the attack cycle. Once the Predator
reaches your comm-port, it unleashes a Mole Tunneling Program which
starts eating its way through your comm-port, looking for your
transmitter. If it get it, you're toast (er, disconnected)!

The hoverjet moves in strange ways. It makes right angle turns, can go
forward and back, can slide left and right, and also goes up and down.
Everything is done with the keyboard. The mouse and joystick are not
supported at all, and considering how the hoverjet moves, it makes
sense. The numeric keypad is used for all movement-related functions as
well as shield activation and weapon firing, while the leftmost keys of
the main keyboard are used for all other functions.

Cyberdrome's graphics are nothing spectacular, but there are some neat
touches, like the way your partner's hoverjet fades to invisibility when
he/she turns on the negative shields. The sounds consist mainly of
functional beeps, pings, and the whoosh of your hoverjet.

You can play this game by yourself, but Cyberdrome was really designed to be played by a two-player team with two machines hooked up together via modem or null-modem cable. This is definitely a game where the gameplay transcends the graphics. It's not for everybody, but is a welcome addition to the limited realm of multiplayer/multiCPU interactive games.

Rhea-FX is planning on releasing some mission disks in the future. Cyberdrome comes on one double-sided disk with manual-word-lookup copy protection, 1 meg required, runs in color only, modem and data link support, $39.95 from Fair Dinkum. -- Eric Bitton

Ork - Alien Adventure
Game; ST, STe, TT

"The Killing Game Show meets Shadow Of The Beast with slightly insane puzzles." That's a fairly accurate description of ORK. It's a sideview omni-scrolling platform shootemup with some seriously weird aliens and landscapes. Some of the puzzles (especially in the later levels) are in the old Infocom text adventure style of obscurity. I mean, how many of you would have guessed that you needed a rocket to dislodge a key from a platform you can't reach? Never mind that you had to get the rocket from a jar that you had to place on an arrow and break by shooting a rock and letting the pieces fall on it... I guess that's why Psygnosis threw in a booklet with a complete walk-through (in four languages) free of charge.

OK, in Ork, you're are an aspiring alien space captain, a member of a race of really-really-really tough customers. You're about to face your final exam, and if you make it through alive, you'll be rewarded with a star cruiser. If you don't make it through alive, you're quite obviously dead. There are only 6 levels, but they're plenty tough.

You can save one game position to a disk, but only from one of the many neat little data terminals scattered throughout a level. Those terminals also provide you with object information, a map of the surrounding area (if you picked up the scanner module), the status of your character, and an indicator showing how much of the game you have completed so far.

This particular Psygnosis title doesn't have the expected animated intro sequence that usually takes up all of disk 1, and it's not really missed. Ork's game graphics are very colorful. Your on-screen character is a little on the strange side, but then again, he IS an alien! He looks like an organic walker machine with cement mixers strapped to his back (they're jet engines for flying, of course). The digitized sound is nicely implemented, with a constant background thrumming, explosions and alien animal noises.

If you like platform games and hard puzzles, check out Ork. It comes on 2 disks, from Psygnosis US/UK. -- Eric Bitton

Mah-Jong Solitaire 3.0 - Now Much More than Drachen
Game; ST, STe, TT, Falcon

Times change. It was nearly two years ago that I saw Cali-Co's Mah-Jong. Then, I was unimpressed, not by Cali-Co's execution of the

classic Shanghai/Ma-Jong tile match game, but by how little it distinguished itself above the free public domain title DRACHEN.

The new 3.0 release of Mah-Jong is a different animal (a cat, specifically). With modest expectations of the $40 retail game, I booted and installed Mah-Jong on my hard drive. I was more than pleasantly surprised by colorful screens, dozens of choices of play area "tablecloths", a variety of tile designs, and a choice of many starting patterns. From out of the blackness above the menu bar, a pair of green cat eyes follow your every move. This is "Shadow Bouncer", and you can turn her off if she makes you nervous.

All this color and design does more to the gameplay than you might imagine. The game itself has been a sure winner in every incarnation to date. The tile recognition and matching/removal rules are standard in Cali-Co's version, but the challenge varies radically depending on the combination of tiles and backgrounds. A traditional game is available, or for a maddening but compelling game, try dominos for tiles on the black neon background. Or use the Navy Flag tiles on the blue wave tablecloth. Or the animal tiles, or the little people, the Morse code or alphabet or Rune blocks... you get the idea. Not only are the games given a whole new effect, they are educational, capable of aiding recognition of letters, codes, or, um, cats. There's lots of cats here.

Mah-Jong V.3.0 requires a color monitor in low resolution (fine on a TV), and any ST ever built will run it. Really nice touches throughout include switches for every conceivable option, including keyboard equivalents, show removed pieces, help, undo, random or selected game setups, and a game pause with a colorful scribbling screensaver. There's no music or sounds other than a wisking effect as tiles are removed.

Cali-Co puts Mah-Jong 3.0 in an unassuming bag-pack, using minimal and environmentally sane recycled paper. At $40, it's challenge is to be worth at least $40 more than the very good free versions that populate the BBS libraries. It succeeds, and will be a lasting joy for kids and adults. Cali-Co Superior Software, P.O. Box 9873, Madison, WI 53715, (608) 255-6523. -- Dr. Paul Keith

Tracker/ST - Mailing List and More
Application; ST, STe, TT, Falcon

Tracker/ST, from Step Ahead Software, has grown steadily from its beginnings as a mailing address database. Now, it's a unique productivity tool.

I work for myself, which means that I work all the time. I have a need to keep track of the people I come in contact with, and to keep notes on these elusive entities that I call my contacts. When I call them after a few weeks or months, it's nice to remember what I've said to them. I want to segregate the people in my list so that I give myself an idea what they're about. I might even want to call them with a single flick of my finger, then type up the facts our conversations and know that my note will stay with the person's file. In the end, I'd probably like to send them a quick letter, or include some of them in a mass mailing with a personal touch, possibly a form letter customized with a their name and address and a few personalized comments.

Tracker/ST is artfully crafted to do all this and more with one program

on my computer, and avoid the paper, files, and confusion of office
life. Tracker is divided into three sections, the ENTRY screen where
you enter your information, the POWER section that lets you sort your
information in a variety of different ways, and the QUICK LETTER section
that formats and prints your letters.

From the ENTRY screen, a one-key command lets you search for one of your
records. And it happens real fast, especially handy when you're on the
phone with someone on your list and you want to know their history.
You'll have their whole address listing, plus an area for short notes,
and entry fields that allow you to place words and symbols that can be
sorted in a variety of ways when in the POWER section of the program.
Tracker/ST lets you pull up a record, put on your telephone headset and
dial a number of clients in quick succession. A LONG NOTES feature lets
you get really detailed in your attached information.

Once you've made your calls and entered any changes, you can run a
report selected groups of people in your list to help you decide who you
need to call next time, and what kind of action is needed in your follow
up. This makes the work you do in the future easier and a lot more
complete and accurate. Tracker doesn't make decisions for you, but it
sorts your information in an effort to help you make those decisions.

I rely on Tracker/ST as a very solid program. It's actively supported
on the Genie information service by the author, Nevin Shalit, and is
also designed to integrate with an advanced envelope/label program
called GEMvelope, sold separately.

Tracker/ST increases the effectiveness of your efforts. It provides me
with the tools that I use a that a normal database just doesn't have.
Tracker/ST V.3.04, $99.95, from Step Ahead Software, 496-A Hudson Street
#F39, New York, NY 10014, (212) 627-5830. -- Steve Blackburn

HyperLINK - Relational Interactive Database
Application; ST, STe, TT

HyperLINK can't really be compared with any other program on the Atari
platform. Like HyperCard on the Mac, it's a database program that can
show related graphic images, animation, sounds, and text, all at the
same time in up to seven different windows on your color or monochrome
monitor. It requires at least one meg of ram, a double sided disk
drive, a hard drive is highly recommended. The disparate output formats
can be linked together with buttons that you create through the use of
what is called the Application Builder, a tool to create your own
personalized applications. Multiple applications can run at the same
time and reports can be generated for output to your printer.

HyperLINK can link a number of different database functions and multiple
media into one process, application, or display. The possibilities are
limited only by your imagination and ambition. But HyperLINK is just a
tool, you have to create the functions you want to use, something that
can be fairly difficult to master, and lots of work to fulfill.
Fortunately, developers at JMG have gone out of their way to make their
system accept and direct data files prepared with other commercial
databases like DBase, and its own data can even be edited and
manipulated via DBase tools.

Applications can be built to track products in your inventory,
collections of coins, records, people or anything you may need to keep

track of in a database. Or, consider the educational possibilities of
interactive displays. Business people can train their employees on the
varied aspects of their jobs, and schools can generate applications to
help understand difficult subjects.

HyperLINK Version 2.0 has just been released which adds features,
finally offers a usable manual, and fixes problems with the report
generator. JMG continues to demonstrate that they and their program are
here to stay.

Simple database needs don't require the power and the freedom of
HyperLINK. But if you want to do something that will provide you with
an expanded view of your database with links to multimedia sub-
processes, check it out. A free "run time only" version of HyperLINK
(available on GEnie and local bulletin boards) will let you see for
yourself what it can do. Sample HAP files (applications) are also
available that will give you ideas, like a map of Canada that lets you
click on areas to get close-up views and data about the Provinces.
HyperLINK, $149, from JMG Software, 892 Upper James Street, Hamilton,
Ontario L9C 3A5, (416) 575-3201. -- Steve Blackburn

The ST Assembly Language Workshop Volume 1
Book; ST, STe

Clayton Walnum, author of the highly acclaimed "C-Manship Complete" now
breaks the assembly language coding conundrum. Designed to be a
tutorial, this first volume of a three volume series teaches the basics
of 68000 assembly language programming on the Atari ST to those already
familiar with computer programming in high level languages like C or
even BASIC. The advantages in learning assembler is that a high level
language programmer can integrate assembly routines inside of existing
programs for maximum efficiency.

The $24.95 price includes a 260 page book and a disk. The step by step
tutorial covers in eleven chapters an overview of assembly language, an
explanation of the binary and hexadecimal numbering system, the ST's
stacks, registers and 13 addressing modes, branching and sub-routines,
and a 68000 Instruction reference by Bryan Schappel. By the end of the
tutorial the reader will be able to comfortably convert numbers, call
the numerous O.S. functions in GEM, and handle disk files in assembler.
The accompanying disk contains the ASCII listings of the example
programs, the executable versions of these programs and the public
domain program "The Take Note Calculator," which can be installed as a
desk accessory. The tutorial does not include an assembler, so the user
must provide his own to assemble finished code. The programs in the
tutorial were designed using Devpac 2, and are also supported by The Mad
Mac Assembler.

With the ST Assembly Language Workshop, learning 68000 Assembly is easy
and straightforward for the beginner. This manual is a well organized
work and a fun way to learn a potentially confusing and frustrating
language. Volume 2 will expand on what is learned in Volume 1 by
applying those assembly skills to GEM programming by covering file
sectors, alert boxes, menus and windows. Volume 3 will cover advanced
GEM programming. I look forward in continuing the workshop in volumes 2
and 3.

The ST Assembly Language Workshop Volume 1, by Clayton Walnum, $24.95
with disk from Taylor Ridge Books. -- Kevin Festner

The A.E.S. Quick Reference
Book; ST, STe, TT

The A.E.S. is the Application Environment Services that provides the
Atari ST/TT high level functions. It creates and maintains the desktop
environment with its drop down menus, dialog boxes, icons and windows.
The A.E.S. Quick Reference is the first volume in a planned three
volume reference series providing the experienced Atari programmer or
developer a complete guide to the A.E.S. Library of Functions. It is
not a tutorial, but rather a catalog of pre-existing assembly language
function calls that can be integrated into existing programs.

The $11.95 price includes a 92 page book and an accompanying diskette
and is well worth the price for those already experienced in GEM
programming. For the novice, this quick reference will only serve to
confuse and frustrate. Each of the 68 AES functions is alphabetically
ordered by function name and thoroughly explained. The assembly source
code is included as well as examples of each function call in C.
Assembly language or C programmers can make use of the included complete
program shells as templates for their own programs. The AES libraries
range from GEM interface functions, keyboard, mouse, screen and window
display functions to memory and file applications, as well as AES
message words.

Volume two of the Quick Reference series will cover the VDI, the Virtual
Device Interface, and volume three will cover the lower level OS
functions found in the BIOS, XBIOS, and GEMDOS. Programmers will
welcome the books, but if this all is alphabet soup to you instead of
exciting news, skip this series.

The A.E.S. Quick Reference is by Clayton Walnum, $11.95 including disk
and bibliography, from Taylor Ridge Books. -- Kevin Festner

Cubeat - MIDI Power, Low Price
MIDI; ST, STe

Cubeat is one of the baby brothers to Steinberg's Cubase, a program that
provides a modular package for sequencing, scoring, and control over
both keyboards and recording equipment. The contention is that Cubeat
lacks only Cubase's notation features, and is otherwise more or less the
same. But it's not quite true. On the practical side, the program will
not run on the TT -- Cubase was updated, cartridge key and all, to work
on the TT. Examination of the sequencer side of Cubase also indicates
that Cubeat doesn't completely share its big brother's features.

On the positive side, Cubeat is a lot of bang for the buck. The
sequencer relies on extensive graphics in its interface, from displaying
parts within tracks by event (this can be turned off) to the way editing
is depicted. For example, you can make small adjustments in event
placement by using a boot-shaped mouse icon to kick the chosen event
into the next slot.

The extensive use of graphics, even when they appear insufferably cute,
makes Cubeat exceptionally easy to use even on a surface level. You can
operate on the parts that make up a track represented as pieces of tape,
edit them with a scissors icon and assemble them at will by using a glue
tube icon. Once you start diving below the surface, the power of the

program becomes very evident--you can manipulate MIDI data in a variety
of ways, right down to the choice of file types, and you can sync the
computer to outside devices via a number of options. Cubeat works very
handily with the Fostex R8/MTC-1 multitrack tape recorder and MIDI
synchronizer combination, which relies on a combination of MIDI Time
Code and MIDI Machine Control.

It's this power that makes Cubeat worthwhile despite the difficulties (a
tendency to lock up periodically, an occasional failure to notice the
copy-protection key, and disagreements with most all standard
accessories and auto programs). Steinberg provides extensive support
for the program via numerous accessories, available on GEnie, as well as
by mail from Steinberg-Jones.

If you don't need direct program access to notation, Cubeat is well
worth a serious look as a powerful and easy to use MIDI sequencer and
system control. Cubeat, $329, from Steinberg/Jones, 17700 Raymer Street
#1001, Northridge, CA 91325, (818) 993-4091. -- Steve McDonald

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                                 | GEnie and hit return.
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